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DATE MAILED: 10/21/2003

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/003,915 11/02/2001 Anthony J. Mauro 460.2115USU 7768 7590 10/21/2003 **EXAMINER** Charles N.J. Ruggiero, Esq. ANDERSON, CATHARINE L Ohlandt, Greeley, Ruggiero & Perle, L.L.P. ART UNIT PAPER NUMBER 10th Floor One Landmark Square 3761 Stamford, CT 06901-2682

Please find below and/or attached an Office communication concerning this application or proceeding.

		_	$\vee$	
		Application No.	Applicant(s)	
		10/003,915	MAURO ET AL.	
	Office Action Summary	Examiner	Art Unit	
		C. Lynne Anderson	3761	
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	correspondence address	
THE I - Exter after - If the - If NO - Failu - Any r	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a reply repriod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed  s will be considered timely. It he mailing date of this communication. CD (35 U.S.C. § 133).	
1)🖾	Responsive to communication(s) filed on <u>08 F</u>	August 2003 .		
2a)⊠	This action is <b>FINAL</b> . 2b) Th	is action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
	on of Claims			
	Claim(s) <u>1-38</u> is/are pending in the application	•		
	4a) Of the above claim(s) is/are withdrawn from consideration.			
•	Claim(s) <u>1-38</u> is/are allowed.			
•	Claim(s) is/are rejected.			
7)	Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers				
	·	r		
9) ☐ The specification is objected to by the Examiner.  10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.				
If approved, corrected drawings are required in reply to this Office action.				
12) The oath or declaration is objected to by the Examiner.				
Priority under 35 U.S.C. §§ 119 and 120				
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).				
	a) ☐ All b) ☐ Some * c) ☐ None of:			
	1. Certified copies of the priority documents	s have been received.		
	2. Certified copies of the priority document	s have been received in Applicat	ion No	
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>				
	Acknowledgment is made of a claim for domesti			
a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.				
Attachment(s)				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)				
S. Patent and Trademark Office				

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### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3, 18, 20-22 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Swanson (5,783,502).
- 3. With respect to Claims 1-3, 18, 20-22 and 37: Swanson discloses the use of a sheet material that can be used for things such as wound coverings, dressings, sponges and surgical articles (column 4, lines 36-49), where in the absorbent (see Claims 1 and 6), where the fabric is coated with an antiviral compound that is made up of quaternary ammonium groups such as alkyl ammonium compounds (column 6, lines 56-64), and a finishing compound that is used to immobilize the antiviral coating (column 7, lines 19-24).

# Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 6. Claims 4-11, 13, 14, 17, 19, 23-32, 35-36, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson. (5,783,502) in view of Merritt (6,245,361).
- 7. With respect to Claims 4-6, 23, 25 and 26: Swanson discloses the use of quaternary ammonium compounds, but fails to disclose a specific compound. Merritt discloses the use of an antibacterial compound for use on skin (column 3, lines 58-62), that contains a bactericidal quaternary ammonium comprises mixtures of alkyl dimethyl benzylammonium chloride and alkyl dimethyl ethylbenzylammonium chloride (see Column 6, lines 52-60). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the antibacterial agent of the antiviral coating of Swanson be replaced with the antibacterial compound that contains the mixtures of alkyl dimethyl benzylammonium chloride and alkyl dimethyl ethylbenzylammonium chloride, as disclosed by Merritt, in order to provide an anti-viral composition that are effective in use at places such as hospitals, and medical clinics,

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and does not produce a harsh smell in order to be tolerable to people (see Columns 1 and 5).

- 8. With respect to Claims 7-9, 12, 24, 27 and 28: Swanson discloses the quaternary ammonium compounds being used in percentages 1 and 4% (see Table 2) of the composition, but fails to disclose the ammonium compounds being 1-4% of entire absorbent product. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the quaternary ammonium compounds being 1-4% weight of the absorbent product, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.
- 9. With respect to Claim 10-14, 17, 29-32 and 35-36: Merritt discloses the quaternary ammonium compounds include less than 15% of a surfactant that can be nonionic (column 7, lines 18-35).
- 10. With respect to Claims 19 and 38: See Merritt column 7, lines 50-55.
- 11. Claims 15, 16, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson and Merrit as applied to claims 1, 13, 14,20, 31 and 32 above, and further in view of Hama et al (5,817,844)...
- 12. With respect to Claims 15, 16, 33, and 34: Merritt discloses the use of less than 25% of a surfactant and discloses the surfactant to be preferably nonionic, but fails to disclose the surfactant being a polyoxyethylene fatty acid ester. It would have been obvious to one having ordinary skill in the art at the time the invention was made to

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have to have the nonionic surfactant of Merritt be polyoxyethylene, since it is known in the surfactant art, as demonstrated by Hama, that polyoxythylene is a common and well used nonionic surfactant. (See Hama abstract and column 1, lines 7-20).

## Response to Arguments

- 13. Applicant's arguments filed 8 August 2003 have been fully considered but they are not persuasive.
- 14. With respect to Applicant's arguments that Swanson does not disclose a composition having synergistic antibacterial properties effective to neutralize the production of TSST-1 toxin and reduce Staphylococcus aureus bacteria growth, Swanson discloses the claimed composition, and therefore it would be inherent that the composition would provide the synergistic antibacterial properties. The instant specification discloses suitable antibacterial compounds that effectively reduce S. aureus bacteria growth, including quaternary ammonium compounds. The reduction of S. aureus bacteria growth results in the neutralization of the production of TSST-1. Swanson discloses a compound shown in the instant specification to effectively reduce S. aureus bacteria growth and neutralize production of TSST-1, and therefore discloses the claimed invention.
- 15. In response to applicant's argument that Merritt discloses nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the

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claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Merritt teaches the use of quaternary ammonium compounds as antibacterial compounds for use in the medical field. The examiner is replying on the Merritt reference for the teaching of the use of the antibacterial, quaternary ammonium compound in the medical field. The examiner is not replacing the entire compound of Swanson with the compound of Merritt. Therefore it is the examiner's position that the combination of references has motivation, therefore rejection stands as stated above.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (703) 306-5716. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (703) 308-1957. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

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October 17, 2003

WEILUN LO SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3700

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